Identification of the Black-headed Snakes (*Denisonia*) within Victoria

by

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The elapid snake genus *Denisonia* (sensu Boulenger, 1896) contains over twenty Australian species, including a number which bear a strong superficial resemblance in that they are relatively small (seldom exceeding 700 mm), have light brown bodies, and black heads. For this reason these species are often confused. However, there is no doubt that the similarities of some are due to convergent evolution, and that the group is polyphyletic.

This article discusses the Victorian species of black-headed snakes belonging to the genus *Denisonia*, and conservative taxonomic conclusions are made in an attempt to aid the identification of the species and help resolve some of the confusion surrounding them. It is recognised, however, that an Australia-wide revision is necessary before final taxonomic conclusions can be made. It should be pointed out that juvenile specimens of the Brown Snakes, *Demansia textilis* and *Demansia nuchalis*, which also have light brown bodies and black heads occur throughout Victoria. These can be separated very easily from the species under discussion, in that *Demansia* has divided anal and subcaudal scales, while the black-headed *Denisonia* species have single anal and subcaudals.

Rawlinson (1971) published a checklist of the reptiles known to have been collected in Victoria. This list includes five species of black-headed *Denisonia*, viz. *D. brevicauda* Mitchell, 1951, *D. flagellum* (McCoy, 1878), *D. gouldii* (Gray, 1841), *D. nigrostriata* (Krefft, 1869), and *D. suta* (Peters, 1863).

Recent sorting and checking of specimens in the National Museum of Victoria revealed that the Victorian snakes previously identified as *D. brevicauda* and *D. nigrostriata* are conspecific (referable to *D. brevicauda*) and that Victorian specimens referred to *D. gouldii* belong to *D. dwyeri*. Thus it appears that there are only four species of black-headed snakes of the genus *Denisonia* in Victoria, and these are *D. brevicauda* Mitchell, 1951, *D. flagellum* (McCoy, 1878), *D. dwyeri* Worrell, 1956, and *D. suta* (Peters, 1863).

Key To The Species Found In Victoria

1.	Black head patch divided	*flagellum*
	Black head patch undivided	2
2.	Scales in 19 rows	*suta*
	Scales in 15 rows	3
3.	Dark vertebral stripe present	*brevicauda*
	Dark vertebral stripe absent	*dwyeri*

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Denisonia flagellum (McCoy, 1878) Little Whip Snake

This is readily distinguished from other Victorian species by the head pattern, which has two distinct dark patches. The first of these begins on the rostral scale, and extends back onto the nasals and internasals, while the second extends from the anterior border of the frontal, back over the entire head and nape for some six or seven vertebrals. This leaves a pale band across the snout in the region of the prefrontals, which immediately separates this species from any other black-headed Victorian *Denisonia*. Although listed in the literature as having 17 scale rows, ten of the seventy specimens counted had only 15 rows at mid-body.

Distribution: The Museum has specimens from the Eyre Peninsula, S.A., through southern Victoria to the Melbourne area, and then northwards, on the western side of the Great Dividing Range to the A.C.T.

Denisonia suta (Peters, 1863) Curl Snake

This species can be identified by both scalation and colour. It always has 19 scale rows at mid-body (15-17 in the other species under discussion), and its head colouring is distinct in that the pre- and post-oculars are pale, and separated from the upper labials which are also pale, by a dark lateral stripe which extends on each side from the temporals forward, to meet on the rostral. In older specimens the black hood on the head tends to fade, although the lateral head stripe remains prominent.

Distribution: Confined to the north-central and north-west within Victoria, and extending into South Australia, Northern Territory, south-west Queensland and New South Wales.

Denisonia dwyeri (Worrell, 1951) Dwyer's Snake

This species has been confused with Gould's Snake, *D. gouldii* which is confined to Western Australia. It differs from *D. gouldii* in either lacking, or having a much paler reticulated pattern over the body, having a flatter head, and a shorter, heavier body. The black head patch covers the entire head, except for the pre-

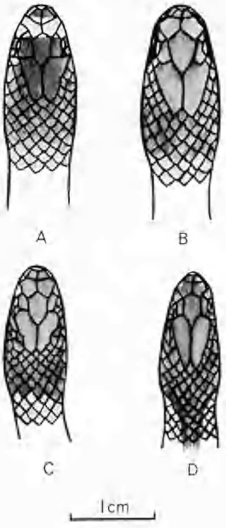

Figure 1

Dorsal aspect of heads of:

A. *D. flagellum* N.M.V. Regd. No. D16019.

B. *D. suta* N.M.V. Regd. No. D15355.

C. *D. dwyeri* N.M.V. Regd. No. D3613.

D. *D. brevicauda* N.M.V. Regd. No. R11109.

Drawings by Miss Rhyllis Plant.

ocular, upper labial and rostral scales, which are a creamy colour. The head patch extends back for 4-6 vertebral scale rows behind the parietals. In one specimen examined there is a faint sign of a vertebral stripe, which is less prominent than found on *D. brevicauda*. Like *D. brevicauda*, this species has 15 scale rows at mid-body.

Distribution: Within Victoria, southwards from the Murray River through the central regions and the western foothills of the Great Dividing Range to the Seymour district. The Museum has one early specimen labelled "Frankston", but some doubt exists as to its provenance. *D. dwyeri* also occurs in similar habitats from southern Queensland through New South Wales.

Denisonia brevicauda Mitchell, 1951. Mitchell's Short-tailed Snake.

This species has a similar head shape and pattern to *D. dwyeri*, and can be best separated from it by the dark vertebral stripe as well as a different habitat. Originally described as a subspecies of *D. nigrostriata*, a long-tailed species from north-eastern Australia, these species can be readily separated from one another by the length of the tail, which in *D. brevicauda* has 23-29 subcaudals (Mitchell, 1951) as against 50-64 (Boulenger, 1896) in *D. nigrostriata*.

Distribution: The warmer drier areas in the north-west of the State, from the Little Desert northwards to the Murray River. It also occurs in the adjacent areas of South Australia.

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Penguins

by MYFANWY BEADNELL

Those funny little men in evening suits! Everybody loves penguins. There are about eighteen varieties of penguins, depending on how some of the variations are classified, ranging from the huge Emperors, standing 48 inches high, to our own 14 inch Fairies, properly known as Northern Blues. Not all penguins are black and white; Emperors and Kings have a lot of yellow and gold, some have greyish or bluish feathers, and many have crests of various sizes, shapes and colours. Nearly all chicks are brownish or greyish.

Penguins are not, as many people think, degenerate birds that have lost the art of flying, but are amongst the most highly specialised of our fauna, and are perfectly adapted to the arduous conditions under which most of them breed. They spend most of their time at sea and have very powerful pectoral muscles and strong